510(K) SUMMARY

JUL 3 2012

Submitter:

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Contact Person:

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Regulatory Affairs Associate

DePuy Spine, Inc.

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Date Prepared:

March 29, 2012

Trade Name:

DePuy PULSE™ Lumbar Cage System

Device Class:

Class II

Product Code(s):

MAX

Common Name:

Intervertebral Fusion Device with Bone Graft, Lumbar

Classification Name:

Intervertebral Body Fusion Device

Regulation Number:

888.3080

Predicate Devices:

Concorde System – K081917, K103488 Concorde Curve System – K101923 Concorde Inline System – K110694

Genesys Spine Interbody Fusion System - K103034

RAY Threaded Fusion Cage – P950019

Device Description:

The DePuy PULSE Lumbar Cage System is designed for use as a lumbar intervertebral body fusion device. The implant devices are available in various geometries and sizes to accommodate patient anatomy. The implant devices are manufactured from medical grade polyetheretherketone (PEEK OPTIMA® LT1) per ASTM F-2026 and

tantalum markers per ASTM F-560.

Indications:

The DePuy PULSE Lumbar Cage System is indicated for use as intervertebral body fusion devices in skeletally mature patients with degenerative disc disease (defined as discogenic back pain with degeneration of the disc confirmed by patient history and radiographic studies) at one or two contiguous levels of the lumbar spine (L2-S1). Patients should have six months of non-operative treatment prior to surgery. These implants are used to facilitate fusion in the lumbar spine and are placed via a PLIF or TLIF approach using autogenous bone. When used as intervertebral body fusion devices these implants are intended for use with DePuy Spine supplemental internal fixation products.

Materials:

Manufactured from medical grade polyetheretherketone (PEEK OPTIMA® LT1) per ASTMF F-2026 and tantalum markers per ASTM F-560.

Comparison to

Predicate Device:

The substantial equivalence of the subject device to the predicates indentified above is based upon the equivalence of intended use, design (fundamental scientific technology), materials, manufacturing methods, performance, sterility, biocompatibility, safety and packaging design.

Non-clinical Test

Summary:

The following mechanical tests were conducted:

- Static and dynamic axial compression testing in accordance with ASTM F-2077 Standard Test Method for Intervertebral Body Fusion Devices. The acceptance criteria was/were met.
- Static and dynamic compression shear testing in accordance with ASTM F-2077 Standard Test Method for Intervertebral Body Fusion Devices. The acceptance criteria was/were met.
- Subsidence testing in accordance with ASTM F-2267 Standard Test Method for Measuring Load Induced Subsidence of Intervertebral Body Fusion Device Under Static Axial Compression. The acceptance criteria was/were met.

Clinical Test

Summary:

No clinical tests were performed.

Conclusion:

Based on the predicate comparison and testing, the subject device DePuy PULSE Lumbar Cage System is substantially equivalent to the predicate devices.





Food and Drug Administration 10903 New Hampshire Avenue Document Control Room –WO66-G609 Silver Spring, MD 20993-0002

Medos International Sarl
% Depuy Spine, A Johnson & Johnson Company
Mr. Eugene Bang
Regulatory Affairs Associate
325 Paramount Drive
Raynham, Massachusetts 02767

JUL 3 2012

Re: K120966

Trade/Device Name: DePuy PULSE™ Lumbar Cage System

Regulation Number: 21 CFR 888.3080

Regulation Name: Intervertebral body fusion device

Regulatory Class: Class II Product Code: MAX Dated: June 08, 2012 Received: June 11, 2012

Dear Mr. Bang:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

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Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

✓Mark N. Melkerson

Director

Division of Surgical, Orthopedic and Restorative Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

INDICATIONS FOR USE STATEMENT

510(k) Number (if known):
<u>Device Name</u> : DePuy PULSE™ Lumbar Cage System
Indications For Use:
The DePuy PULSE Lumbar Cage System is indicated for use as intervertebral body fusion devices in skeletally mature patients with degenerative disc disease (defined as discogenic back pain with degeneration of the disc confirmed by patient history and radiographic studies) at one or two contiguous levels of the lumbar spine (L2-S1). Patients should have six months of non-operative treatment prior to surgery. These implants are used to facilitate fusion in the lumbar spine and are placed via a PLIF or TLIF approach using autogenous bone. When used as intervertebral body fusion devices these implants are intended for use with DePuy Spine supplemental internal fixation products.
Prescription Use X AND/OR Over-The-Counter Use
(Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)
(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)
Concurrence of CDRH, Office of Device Evaluation (ODE)
(Division Sign-Off) Division of Surgical, Orthopedic, and Restorative Devices 510(k) Number K120966